



**DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION
NOTICE OF ACCEPTANCE (NOA)**

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

Alumex Products, Inc.
3151 E. 11th Avenue
Hialeah, FL 33013

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "WS-4500" Aluminum Window Wall System – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W09-45**, titled "Series WS-4500 Alum. Window Wall System (LMI)", sheets 1 through 9 of 9, dated 09/02/09, with revision G dated 08/05/16, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/ series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. **15-0601.09** and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Jorge M. Plasencia, P.E.**



[Signature]
10/21/2016

NOA No. 16-0525.05
Expiration Date: May 12, 2020
Approval Date: October 27, 2016
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA No.10-0209.05)
2. Drawing No. **W09-45**, titled "WS-4500 Alum. Window Wall System (L.M.I.)", sheets 1 through 9 of 9, dated 09/02/09, with revision G dated 08/05/16, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Architectural Testing, Inc., Test Report No. **ATI 91200.01-401-18**, dated 12/16/09, with addendum letter dated 04/15/10, both signed and sealed by Joseph A. Reed, P.E.
(Submitted under NOA No.10-0209.05)

C. CALCULATIONS


1. Anchor verification calculations and structural analysis, complying with **FBC 5th Edition (2014)**, dated 06/04/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No. 15-0601.09)
2. Glazing complies with **ASTM E1300-09**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **14-0916.11** issued to **Kuraray America, Inc.** for their "**SentryGlas® (Clear and White) Glass Interlayers**" dated 06/25/15, expiring on 07/04/18.
2. Notice of Acceptance No. **14-0423.16** issued to **Eastman Chemical Company (MA)** for their "**Saflex HP Clear or Color Glass Interlayers**" dated 06/19/14, expiring on 04/14/18.
3. Notice of Acceptance No. **16-0208.12** issued to Polymer Extrusion Technology, Inc. dba Glasslam for their "**Glasslam Safety-Plus II Glass Interlayer**" dated 06/16/16, expiring on 08/07/18.


Jorge M. Plasencia, P.E.
Product Control Unit Supervisor
NOA No. 16-0525.05
Expiration Date: May 12, 2020
Approval Date: October 27, 2016

Alumex Products, Inc.


NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

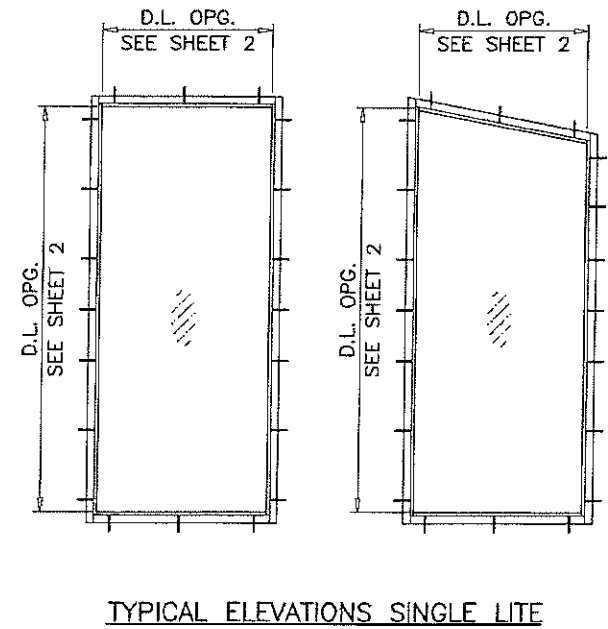
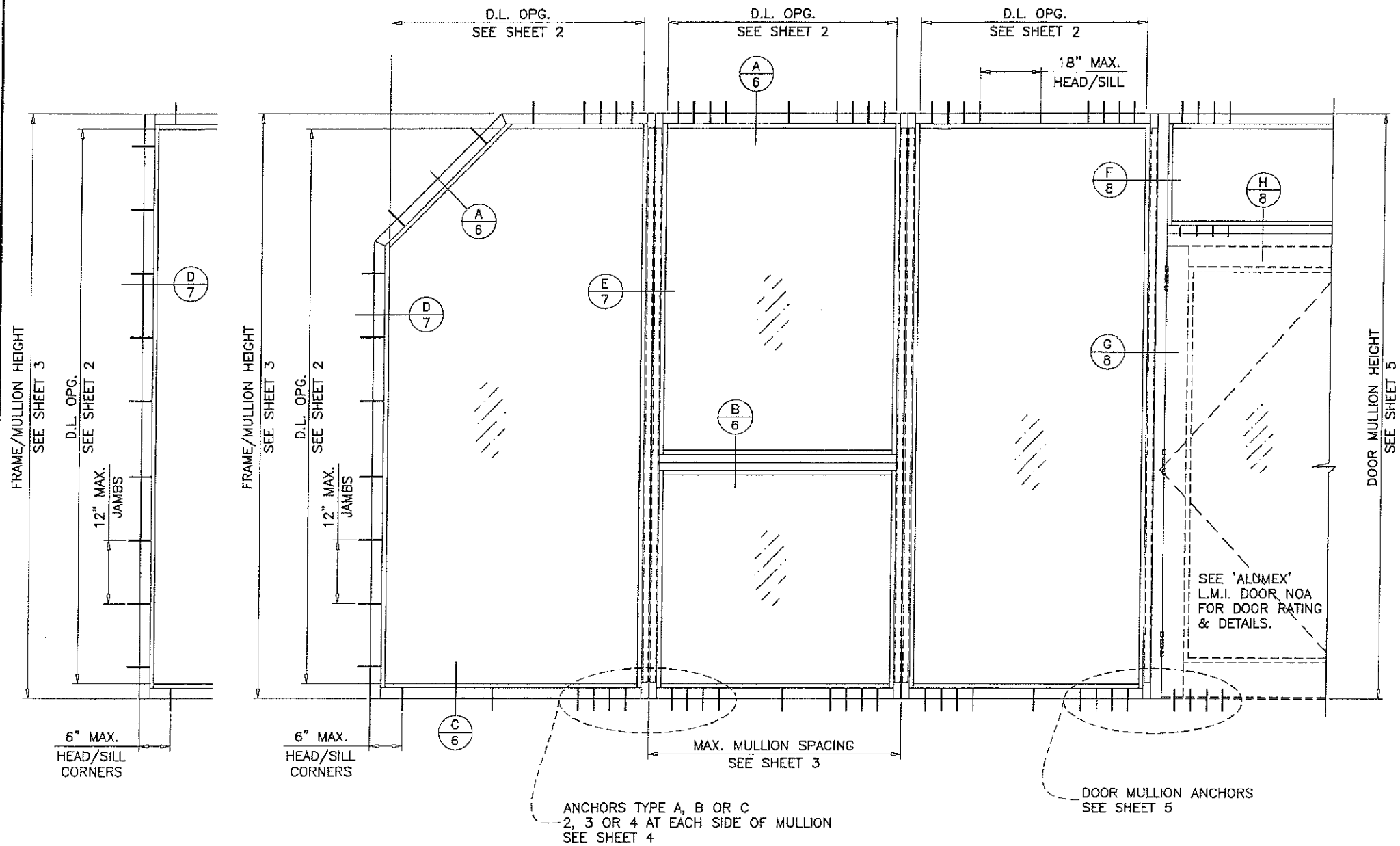
1. Statement letter of conformance, complying with **FBC 5th Edition (2014)**, and of no financial interest, dated 02/25/16, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
2. Laboratory compliance letter for Test Report No. **ATI 91200.01-401-18** issued by Architectural Testing, Inc., dated 12/16/09, signed and sealed by Joseph A. Reed, P.E. *(Submitted under NOA No.10-0209.05)*
3. Statement letter dated September 15th, 2016, issued by Alumex Industries, LLC that it has legally sold all assets, knowhow to Alumex Group Inc. and given-up all rights to NOA # 13-0325.01, 13-0325.02 & #15-0601.09 and requested to rescind the referenced NOA(s).
4. Bill of sale dated 08/26/15 between Alumex Industries, LLC and Alumex Group Inc., signed by Greg George, president and Gabriel Parades, president on behalf of their respective companies.
5. Statement letter dated 08/05/16, issued by Alumex Group, Inc. that it has legally purchased all assets and ownership of the NOA(s) # 13-0325.01, 13-0325.02 & #15-0601.09 and request that the ownership be assigned to Alumex Product Inc., signed by Gabriel Parades, president Alumex Group Inc.
6. Statement letter dated 09-26-16, issued by Alumex Group Inc., stating that Alumex Group Inc., and Alumex Products Inc, are both wholly owned by the same principal and request that NOA(s) issued under Alumex Products Inc, signed by Gabriel Paredes, president & CEO of Alumex Group Inc. and Alumex Products Inc.

G. OTHERS

1. Notice of Acceptance No. **15-0601.09**, issued to Alumex Industries, LLC for their Series "WS-4500" Aluminum Storefront - LMI, approved on 10/22/15 and expiring on 05/12/20.



Jorge M. Plasencia, P.E.
Product Control Unit Supervisor
NOA No. 16-0525.05
Expiration Date: May 12, 2020
Approval Date: October 27, 2016



SERIES WS-4500 ALUMINUM WINDOW WALL SYSTEM

THIS SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT
SHUTTERS ARE NOT REQUIRED.

CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE
REQUIREMENTS OF THE 2014 (5TH EDITION) FLORIDA BUILDING CODE
INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER
LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS
EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE
NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE
REQUIREMENTS OF THE 2014 FLORIDA BUILDING CODE.

TYPICAL ELEVATION

INSTRUCTIONS:

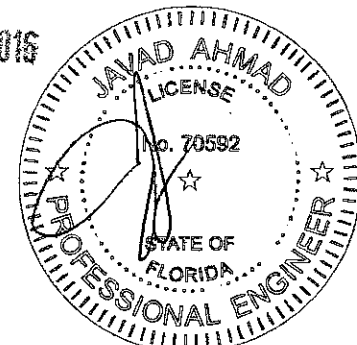
USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN WIND LOAD REQUIREMENT BASED
ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE
USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** SEE CHARTS ON SHEET 2 FOR DESIGN LOAD
CAPACITY OF DESIRED GLASS SIZE.
- STEP 3** CHECK MULLION CAPACITY FOR A GIVEN SPACING AND
HEIGHT USING CHARTS ON SHEET 3
THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** USING CHARTS ON SHEET 4 SELECT ANCHOR
OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD
SPECIFIED IN STEP 1 ABOVE.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2, 3
AND 4 SHALL APPLY TO ENTIRE SYSTEM.
THIS VALUE SHOULD MEET OR EXCEED THE DESIGN
WIND LOAD REQUIREMENT OBTAINED IN STEP 1 ABOVE.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 16-0525.05

Expiration Date 05/12/2020

By 
Miami-Dade Product Control



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL (305) 264-8100 FAX (305) 262-6978
STORE W09-45CDI

WS-4500 ALUM WINDOW WALL SYSTEM (L.M.I.)
ALUMEX PRODUCTS, INC.
3151 E. 11th AVE.
HIALEAH, FL. 33013
TEL (786) 475-8258 FAX (-)

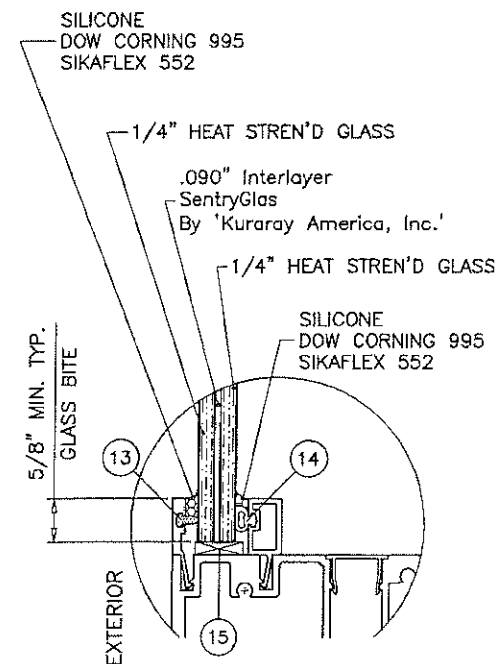
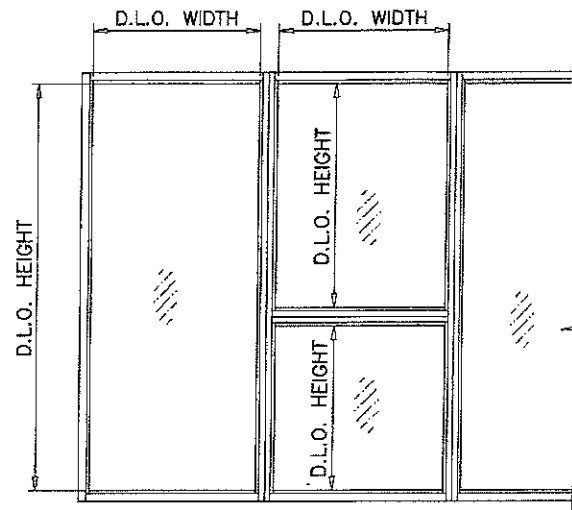
no	date	by	description
C	06.06.13	REV.	PER RER COMMENTS
D	08.15.13	NO	CHANGE THIS SHEET
E	06.08.15	UPDATED	TO 2014 FBC
F	02.24.16	GENERAL	REVISION
G	05.05.16	NO	CHANGE THIS SHEET

date: 09-02-09
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

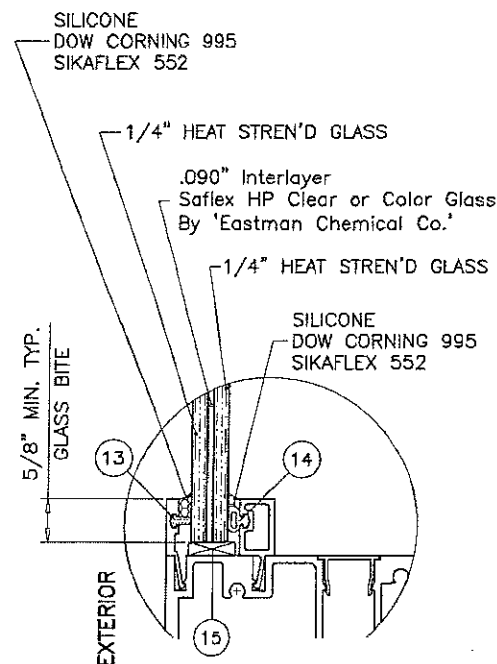
drawing no.
W09-45
sheet 1 of 9

GLASS LOAD CAPACITY - PSF			
NOMINAL DIMS.		GLASS TYPES 'A', 'B' & 'C'	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)
30"	84"	133.0	150.0
36"		133.0	150.0
42"		133.0	137.1
48"		120.0	120.0
54"		106.7	106.7
60"		96.0	96.0
30"	90"	133.0	150.0
36"		133.0	150.0
42"		133.0	137.1
48"		120.0	120.0
54"		106.7	106.7
60"		96.0	96.0
30"	96"	133.0	150.0
36"		133.0	150.0
42"		133.0	137.1
48"		120.0	120.0
54"		106.7	106.7
60"		96.0	96.0
30"	102"	133.0	150.0
36"		133.0	150.0
42"		133.0	137.1
48"		120.0	120.0
54"		106.7	106.7
30"	108"	133.0	150.0
36"		133.0	150.0
42"		133.0	136.2
48"		120.0	120.0
54"		106.7	106.7
30"	114"	133.0	150.0
36"		133.0	150.0
42"		133.0	134.5
48"		120.0	120.0
54"		106.7	106.7
30"	120"	133.0	150.0
36"		133.0	150.0
42"		133.0	133.0
48"		120.0	120.0
54"		106.7	106.7

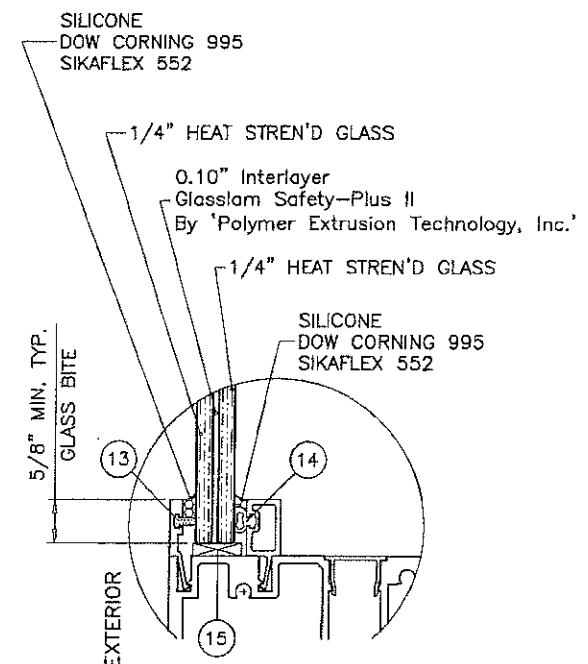
NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS).



GLASS TYPE 'A'



GLASS TYPE 'B'



GLASS TYPE 'C'

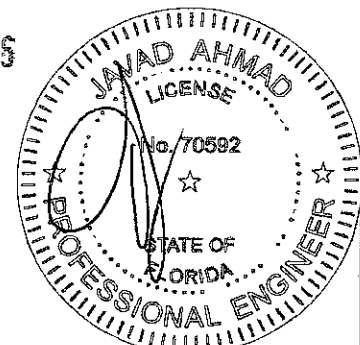
GLAZING OPTIONS

AUG 19 2016

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 16-0525.05

Expiration Date 05/12/2020

By 
Miami-Dade Product Control



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE W09-45CDI

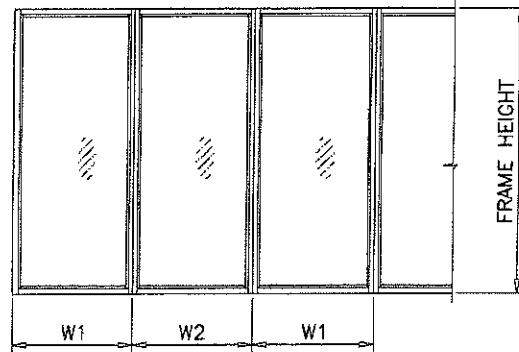
WS-4500 ALUM WINDOW WALL SYSTEM (L.M.I.)
ALUMEX PRODUCTS, INC.
3151 E. 11th AVE.
HIALEAH, FL. 33013
TEL. (786) 475-8258 FAX. (-)

no.	date	by	description
C	06.06.13	REV. PER RER COMMENTS	
D	08.15.13	NO CHANGE THIS SHEET	
E	06.08.15	UPDATED TO 2014 FBC	
F	02.24.16	GENERAL REVISION	
G	06.05.16	REV. PER RER COMMENTS	

date: 09-02-09
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:
drawing no.
W09-45
sheet 2 of 9

MULLION LOAD CAPACITY - PSF WITHOUT INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		MULL 'M1'		MULL 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	84"	120.0	120.0	133.0	150.0
36"		120.0	120.0	133.0	150.0
42"		120.0	120.0	133.0	150.0
48"		120.0	120.0	133.0	150.0
54"		120.0	120.0	133.0	150.0
60"		120.0	120.0	133.0	150.0
30"	90"	120.0	120.0	133.0	150.0
36"		120.0	120.0	133.0	150.0
42"		120.0	120.0	133.0	150.0
48"		120.0	120.0	133.0	150.0
54"		120.0	120.0	133.0	150.0
60"		113.3	113.3	133.0	150.0
30"	96"	120.0	120.0	133.0	150.0
36"		120.0	120.0	133.0	150.0
42"		120.0	120.0	133.0	150.0
48"		115.6	115.6	133.0	150.0
54"		105.3	105.3	133.0	150.0
60"		97.5	97.5	133.0	150.0
30"	102"	120.0	120.0	133.0	150.0
36"		120.0	120.0	133.0	150.0
42"		113.8	113.8	133.0	150.0
48"		101.4	101.4	133.0	150.0
54"		92.1	92.1	133.0	144.7
30"	108"	120.0	120.0	133.0	150.0
36"		116.1	116.1	133.0	150.0
42"		100.9	100.9	133.0	150.0
48"		89.7	89.7	131.7	141.0
30"	114"	120.0	120.0	133.0	150.0
36"		103.8	103.8	133.0	150.0
42"		90.1	90.1	132.3	141.5
48"		79.9	79.9	117.4	125.6
30"	120"	110.2	110.2	133.0	150.0
36"		92.9	92.9	133.0	146.0
42"		80.7	80.7	118.5	126.8
48"		71.7	71.7	105.3	112.7

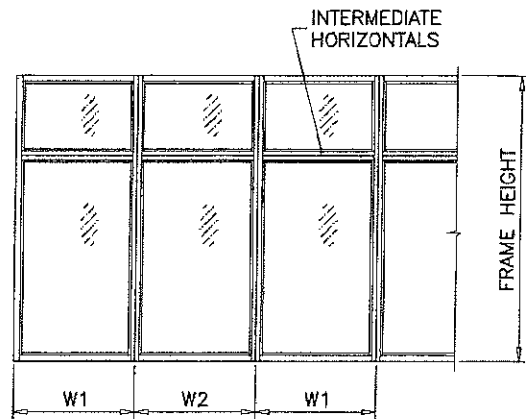
NOTE:
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



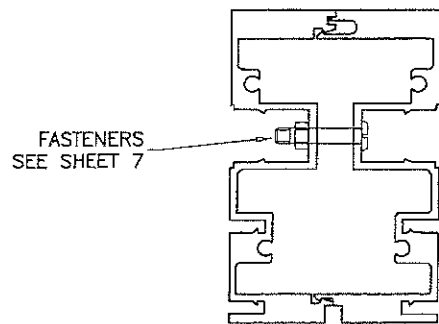
$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

MULLION LOAD CAPACITY - PSF WITH INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		MULL 'M1'		MULL 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30"	84"	120.0	120.0	133.0	150.0
36"		120.0	120.0	133.0	150.0
42"		120.0	120.0	133.0	150.0
48"		120.0	120.0	133.0	150.0
54"		120.0	120.0	133.0	150.0
60"		111.0	111.0	133.0	150.0
30"	90"	120.0	120.0	133.0	150.0
36"		120.0	120.0	133.0	150.0
42"		120.0	120.0	133.0	150.0
48"		120.0	120.0	133.0	150.0
54"		107.4	107.4	133.0	150.0
60"		96.7	96.7	133.0	150.0
30"	96"	120.0	120.0	133.0	150.0
36"		120.0	120.0	133.0	150.0
42"		120.0	120.0	133.0	150.0
48"		106.2	106.2	133.0	150.0
54"		94.4	94.4	133.0	148.4
60"		85.0	85.0	124.8	133.6
30"	102"	120.0	120.0	133.0	150.0
36"		120.0	120.0	133.0	150.0
42"		107.5	107.5	133.0	150.0
48"		94.1	94.1	133.0	147.9
54"		83.6	83.6	122.8	131.5
30"	108"	120.0	120.0	133.0	150.0
36"		111.9	111.9	133.0	150.0
42"		95.9	95.9	133.0	150.0
48"		83.9	83.9	123.3	131.9
30"	114"	120.0	120.0	133.0	150.0
36"		100.4	100.4	133.0	150.0
42"		86.1	86.1	126.4	135.3
48"		75.3	75.3	110.6	118.4
30"	120"	107.7	107.7	133.0	150.0
36"		89.8	89.8	131.9	141.1
42"		77.0	77.0	113.0	121.0
48"		67.3	67.3	98.9	105.9

NOTE:
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

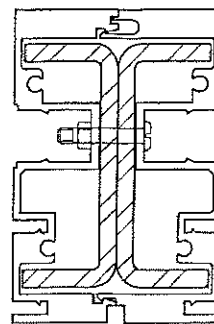


$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



MULLION 'M1'

Ix IN ⁴	Sx IN ³
10.7569	4.5803



MULLION 'M2'

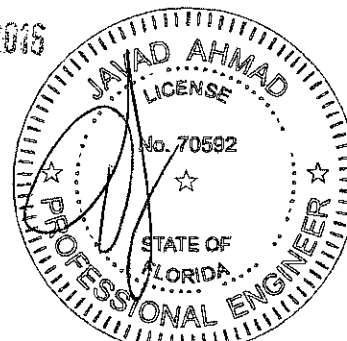
	Ix IN ⁴	Sx IN ³
ALUMINUM	10.7569	4.5803
STEEL	4.4132	2.5218
TOTAL Ix ALUM + Ix STL X 2.9	23.5552	

MULLIONS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **16-0525.05**

Expiration Date **05/12/2020**

By 
Miami-Dade Product Control



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978

STORE W09-45CDI

WS-4500 ALUM WINDOW WALL SYSTEM (L.M.I.)

ALUMEX PRODUCTS, INC.
3151 E. 11th AVE.
HIALEAH, FL. 33013
TEL. (786) 475-8258 FAX. (-)

revisions:

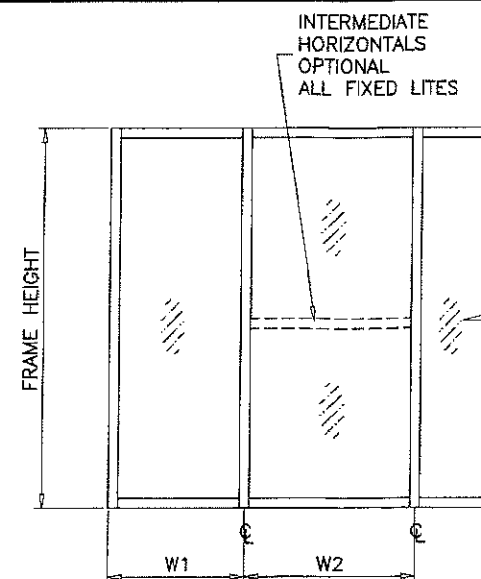
no	date	by	description
C	06.06.13	REV. PER RER COMMENTS	
D	08.15.13	NO CHANGE THIS SHEET	
E	06.08.15	UPDATED TO 2014 FBC	
F	10.24.16	GENERAL REVISION	
G	06.05.16	REV. PER RER COMMENTS	

date: 09-02-09
scale: --
dr. by: TARIQ
chk. by:

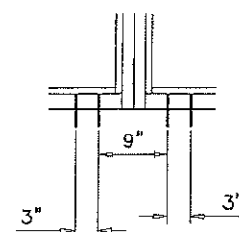
drawing no.
W09-45
sheet 3 of 9

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)										
NOMINAL DIMS.		ANCHORS TYPE 'A'			ANCHORS TYPE 'B'			ANCHORS TYPE 'C'		
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	B2	B3	B4	C2	C3	C4
30"	84"	117.9	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36"		98.3	147.4	150.0	148.6	150.0	150.0	150.0	150.0	150.0
42"		84.2	126.4	150.0	127.3	150.0	150.0	150.0	150.0	150.0
48"		73.7	110.6	147.4	111.4	150.0	150.0	136.9	150.0	150.0
54"		65.5	98.3	131.0	99.0	148.6	150.0	121.7	150.0	150.0
60"		59.0	88.5	117.9	89.1	133.7	150.0	109.5	150.0	150.0
30"	90"	110.1	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36"		91.7	137.6	150.0	138.7	150.0	150.0	150.0	150.0	150.0
42"		78.6	117.9	150.0	118.9	150.0	150.0	146.0	150.0	150.0
48"		68.8	103.2	137.6	104.0	150.0	150.0	127.7	150.0	150.0
54"		61.2	91.7	122.3	92.4	138.7	150.0	113.5	150.0	150.0
60"		55.0	82.6	110.1	83.2	124.8	150.0	102.2	150.0	150.0
30"	96"	103.2	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36"		86.0	129.0	150.0	130.0	150.0	150.0	150.0	150.0	150.0
42"		73.7	110.6	147.4	111.4	150.0	150.0	136.9	150.0	150.0
48"		64.5	96.8	129.0	97.5	146.3	150.0	119.8	150.0	150.0
54"		57.3	86.0	114.7	86.7	130.0	150.0	106.4	150.0	150.0
60"		51.6	77.4	103.2	78.0	117.0	150.0	95.8	150.0	150.0
30"	102"	97.1	145.7	150.0	146.8	150.0	150.0	150.0	150.0	150.0
36"		80.9	121.4	150.0	122.4	150.0	150.0	150.0	150.0	150.0
42"		69.4	104.1	138.8	104.9	150.0	150.0	128.8	150.0	150.0
48"		60.7	91.1	121.4	91.8	137.6	150.0	112.7	150.0	150.0
54"		54.0	80.9	107.9	81.6	122.4	150.0	100.2	150.0	150.0
60"		48.0	71.8	96.8	73.6	111.4	150.0	89.1	150.0	150.0
30"	108"	91.7	137.6	150.0	138.7	150.0	150.0	150.0	150.0	150.0
36"		76.4	114.7	150.0	116.6	150.0	150.0	141.9	150.0	150.0
42"		65.5	98.3	131.0	99.0	148.6	150.0	121.7	150.0	150.0
48"		57.3	86.0	114.7	86.7	130.0	150.0	106.4	150.0	150.0
54"		51.6	77.4	103.2	78.0	117.0	150.0	95.8	150.0	150.0
60"		46.0	68.8	94.9	68.8	103.2	150.0	86.0	150.0	150.0
30"	114"	86.9	130.4	150.0	131.4	150.0	150.0	150.0	150.0	150.0
36"		72.4	108.6	144.8	109.5	150.0	150.0	134.5	150.0	150.0
42"		62.1	93.1	124.2	93.8	140.8	150.0	115.2	150.0	150.0
48"		54.3	81.5	108.6	82.1	123.2	150.0	100.8	150.0	150.0
54"		48.0	71.8	96.8	73.6	111.4	150.0	89.1	150.0	150.0
60"		42.9	64.5	86.0	64.5	96.8	150.0	78.0	150.0	150.0
30"	120"	82.6	123.8	150.0	124.8	150.0	150.0	150.0	150.0	150.0
36"		68.8	103.2	137.6	104.0	150.0	150.0	127.7	150.0	150.0
42"		59.0	88.5	117.9	89.1	133.7	150.0	109.5	150.0	150.0
48"		51.6	77.4	103.2	78.0	117.0	150.0	95.8	150.0	150.0
54"		46.0	68.8	94.9	68.8	103.2	150.0	86.0	150.0	150.0
60"		41.5	61.2	82.6	61.2	91.7	150.0	77.4	150.0	150.0

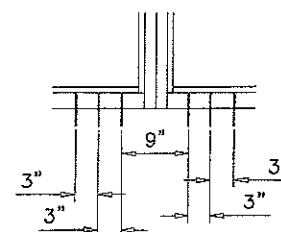
NOTE:
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



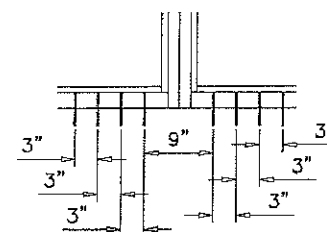
$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$



A2, B2, C2



A3, B3, C3



A4, B4, C4

ANCHORS TYPES: SEE SHEET 6 FOR DESCRIPTION

A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION

A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION

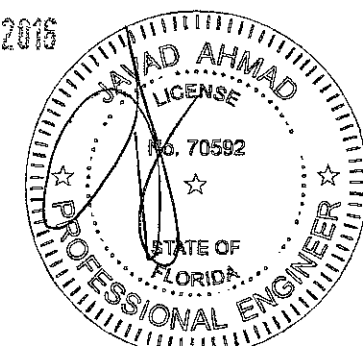
A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION

ANCHORS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 16-0525.05

Expiration Date 05/12/2020

By 
Miami-Dade Product Control



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE/W09-45CDI

WS-4500 ALUM WINDOW WALL SYSTEM (L.M.I.)
ALUMEX PRODUCTS, INC.
3151 E. 11th AVE.
HIALEAH, FL. 33013
TEL. (786) 475-8258 FAX. (-)

no.	date	by	description
C	06.06.13	REV. PER RER COMMENTS	
D	08.15.13	NO CHANGE THIS SHEET	
E	06.08.15	NO CHANGE THIS SHEET	
F	02.24.16	GENERAL REVISION	
G	08.05.16	NO CHANGE THIS SHEET	

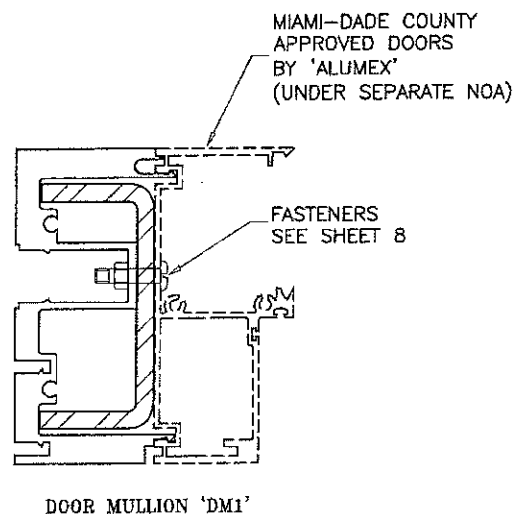
date: 09-02-09
scale: -
dr. by: TARIQ
chk. by:

drawing no.

W09-45

sheet 4 of 9

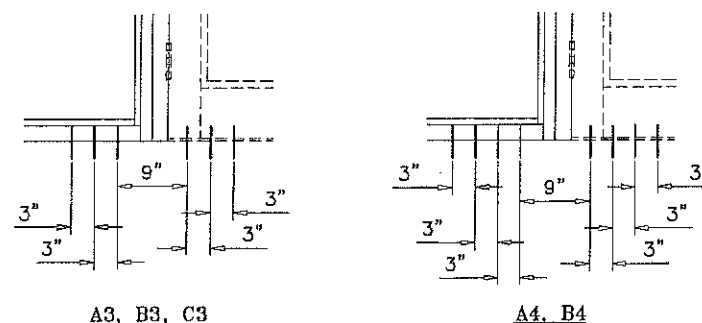
DOOR MULLION LOAD CAPACITY-PSF			
SIDELITE WIDTH INCHES	FRAME HEIGHT INCHES	MULL 'DM1'	
		EXT.(+)	INT.(-)
30	102	120.0	120.0
36		120.0	120.0
42		120.0	120.0
48		120.0	120.0
54		120.0	120.0
30	108	120.0	120.0
36		120.0	120.0
42		120.0	120.0
48		120.0	120.0
54		120.0	120.0
30	114	120.0	120.0
36		120.0	120.0
42		120.0	120.0
48		114.4	114.4
54		114.4	114.4
30	120	119.3	119.3
36		111.9	111.9
42		105.4	105.4
48		99.6	99.6
54		99.6	99.6



MULLION ADAPTER INCLUDED IN PROPERTIES.

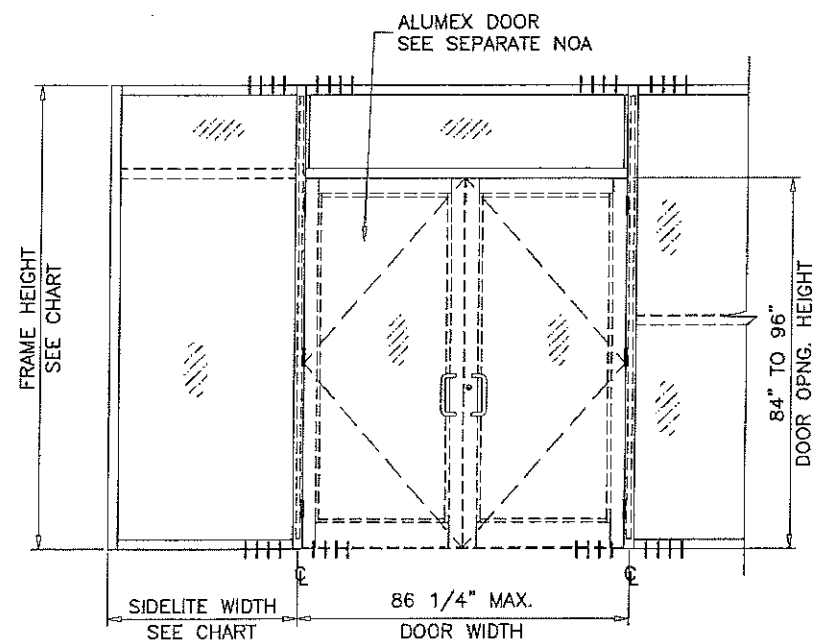
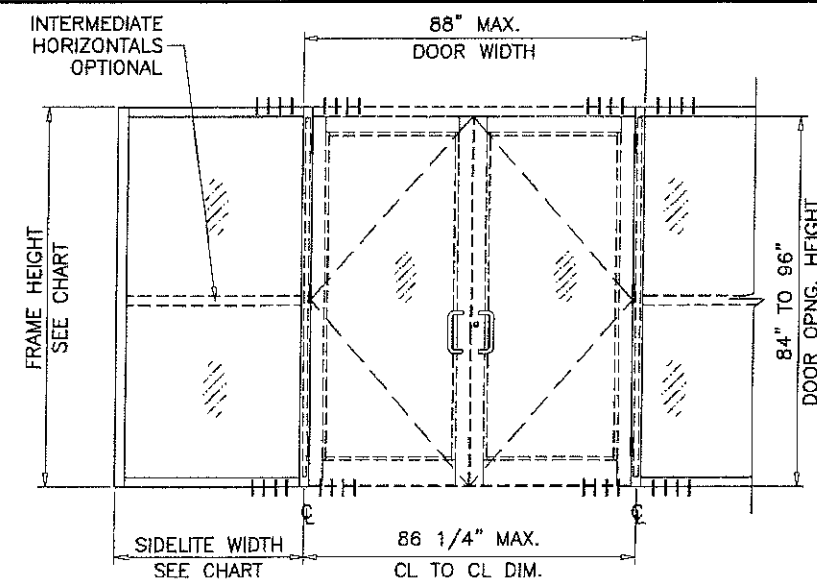
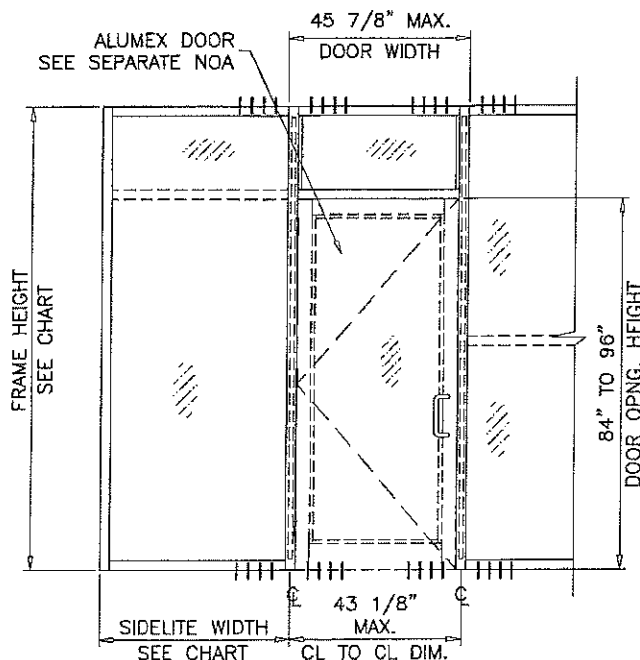
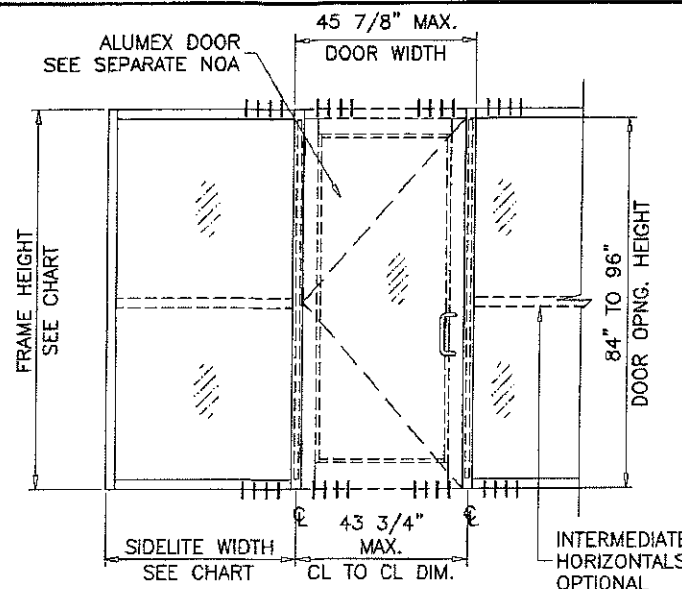
	Ix IN ⁴	Sx IN ³
ALUMINUM	10.9984	4.6719
STEEL	2.5744	1.4711
TOTAL Ix ALUM + Ix STL X 2.9	18.4642	

DOOR MULLION ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)							
NOMINAL DIMS.		ANCHORS TYPE 'A'		ANCHORS TYPE 'B'		ANCHORS TYPE 'C'	
SIDELITE WIDTH	FRAME HEIGHT	A3	A4	B3	B4	C3	C4
30"	102"	90.2	120.0	118.4	120.0	120.0	120.0
36"		85.6	114.2	112.4	120.0	120.0	120.0
42"		81.5	108.6	107.0	120.0	120.0	120.0
48"		77.7	103.6	102.0	120.0	120.0	120.0
54"		74.3	99.0	97.5	120.0	120.0	120.0
30"	108"	86.9	115.9	114.1	120.0	120.0	120.0
36"		82.4	109.9	108.2	120.0	120.0	120.0
42"		78.3	104.4	102.9	120.0	120.0	120.0
48"		74.6	99.5	98.0	120.0	120.0	120.0
54"		71.1	95.0	94.3	120.0	115.8	120.0
30"	114"	83.9	111.8	110.1	120.0	120.0	120.0
36"		79.4	105.9	104.3	120.0	120.0	120.0
42"		75.4	100.6	99.0	120.0	120.0	120.0
48"		71.8	95.8	94.3	120.0	115.8	120.0
54"		68.3	91.3	90.6	120.0	111.6	120.0
30"	120"	81.0	108.0	106.4	120.0	120.0	120.0
36"		76.6	102.2	100.6	120.0	120.0	120.0
42"		72.7	97.0	95.5	120.0	117.3	120.0
48"		69.2	92.3	90.9	120.0	111.6	120.0
54"		65.7	87.8	87.2	120.0	107.1	120.0



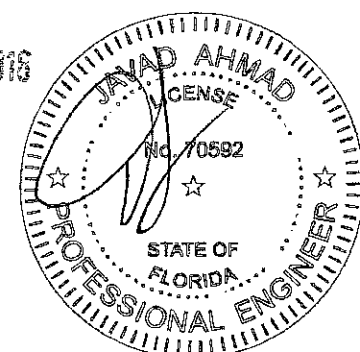
ANCHORS TYPES: SEE SHEET 6 FOR DESCRIPTION

- A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
 B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
 C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION
 A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
 B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
 C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION



DOOR-WINDOW WALL
TRANSITION MULLION

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 16-0525.05
Expiration Date 05/12/2020
By Miami-Dade Product Control

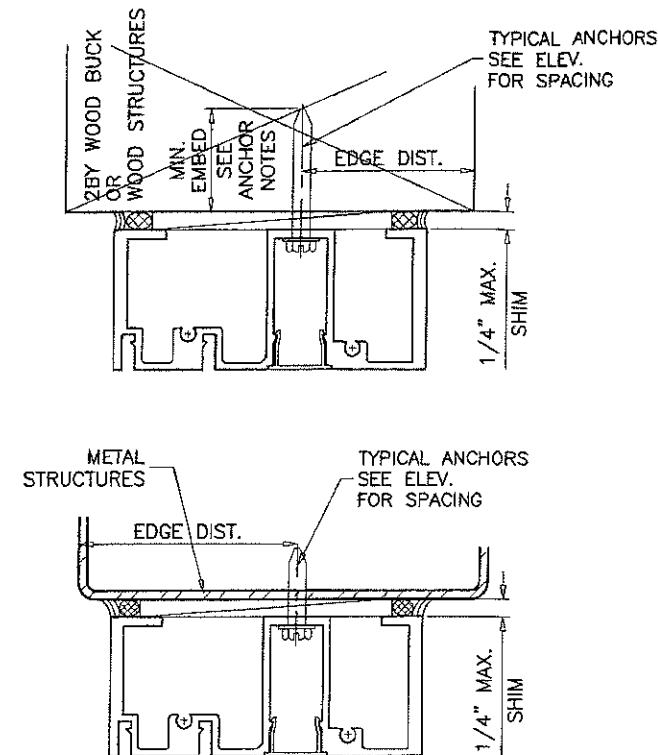
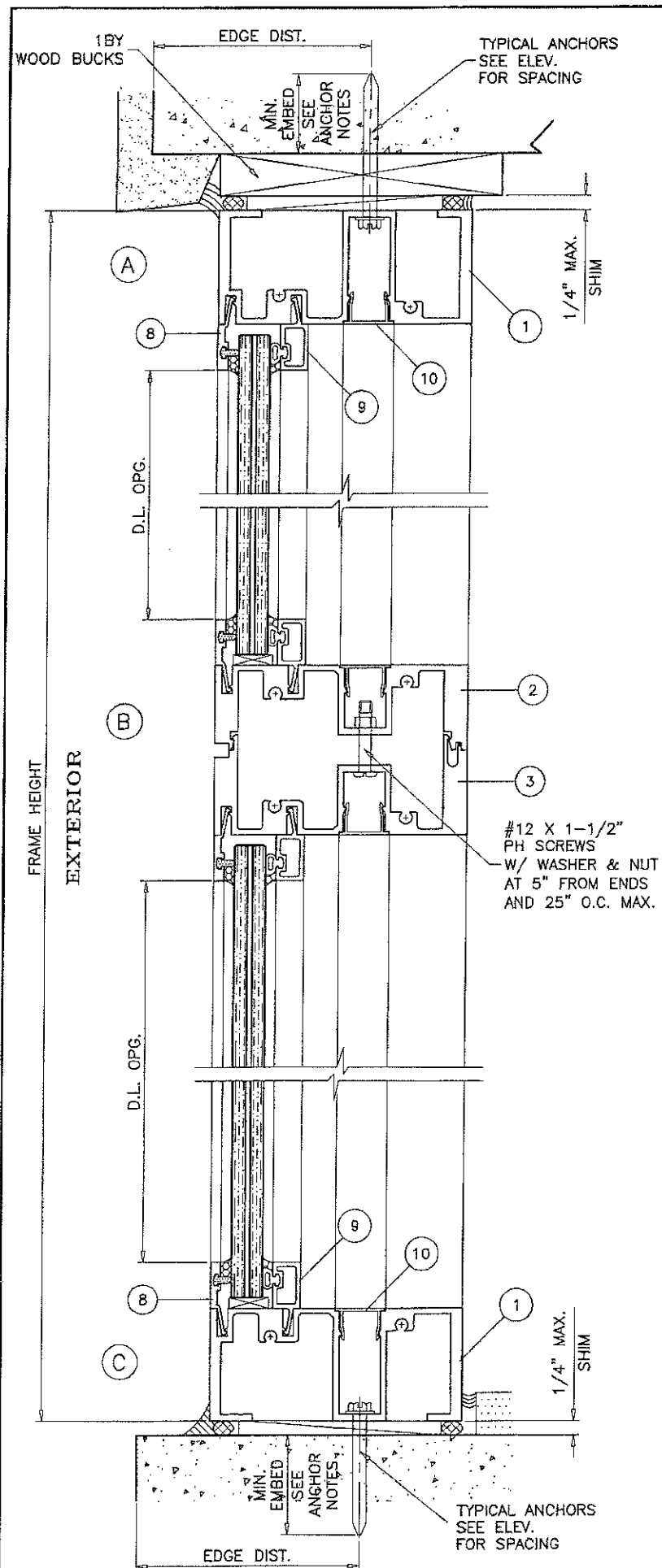


AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL (305) 264-8100 FAX (305) 262-6978
STORE/W09-45CDI

WS-4500 ALUM WINDOW WALL SYSTEM (L.M.I.)
ALUMEX PRODUCTS, INC.
3151 E. 11th AVE.
HIALEAH, FL. 33013
TEL (786) 475-8258 FAX (-)

no	date	description
C	06.06.13	REV. PER RER COMMENTS
D	08.15.13	REV. PER RER COMMENTS
E	06.08.15	NO CHANGE THIS SHEET
F	02.24.16	GENERAL REVISION
G	08.05.16	NO CHANGE THIS SHEET

revisions:
date: 09-02-09
scale: -
dr. by: TARIQ
chk. by:
drawing no.
W09-45
sheet 5 of 9



WOOD BUCKS AND METAL STRUCTURES NOT BY ALUMEX MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'

1/4" DIA ULTRACON BY 'ELCO' ($F_u=177$ KSI, $F_y=155$ KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)

THRU 1BY BUCKS INTO CONC. OR MASONRY
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 1-1/4" MIN. EMBED INTO MASONRY (JAMBS)

DIRECTLY INTO CONCRETE OR MASONRY
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 1-1/4" MIN. EMBED INTO MASONRY (JAMBS)

ANCHOR EDGE DISTANCES

INTO CONCRETE AND MASONRY = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.

TYPE 'B'

1/4" DIA ULTRACON BY 'ELCO' ($F_u=177$ KSI, $F_y=155$ KSI)
 DIRECTLY INTO CONCRETE
 WITH 1-3/4" MIN. EMBED INTO CONC. (HEAD/SILL/JAMBS)

ANCHOR EDGE DISTANCES

INTO CONCRETE = 3" MIN.

TYPE 'C'

#14 SMS OR SELF DRILLING SCREWS ST/ST (GRADE 2 CRS)

INTO METAL STRUCTURES

STEEL : 1/8" THK. MIN. ($F_y = 36$ KSI MIN.)

ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCES

INTO METAL STRUCTURE = 1/2" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.

CONCRETE AT HEAD, SILL OR JAMBS f'_c = 3000 PSI MIN.

C-90 HOLLOW/FILLED BLOCK AT JAMBS f'_m = 2000 PSI MIN.

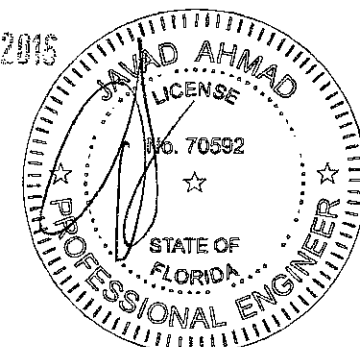
SEALANTS:

ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER OF GLAZING BEAD TO FRAME SEALED WITH DOW CORNING 795 SEALANT.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. **16-0525.05**

Expiration Date **05/12/2020**

By
 Miami-Dade Product Control



AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 TEL. (305) 264-8100 FAX. (305) 262-6978
 STORE/W09-45CDI

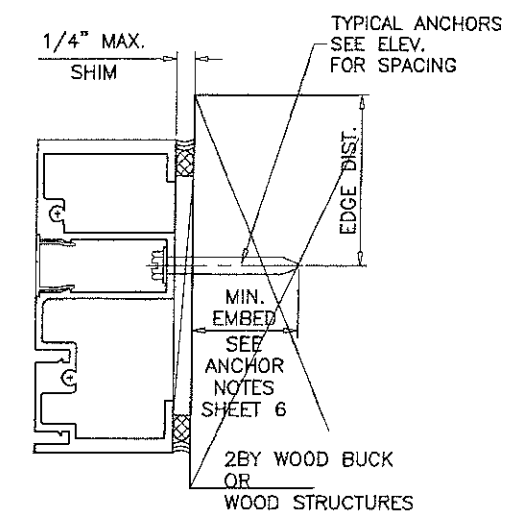
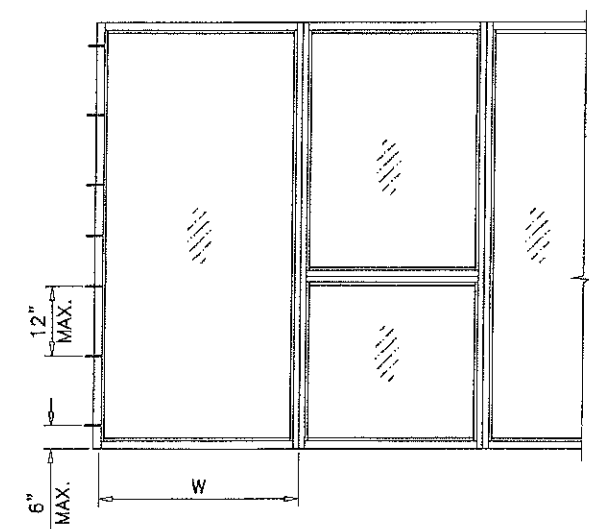
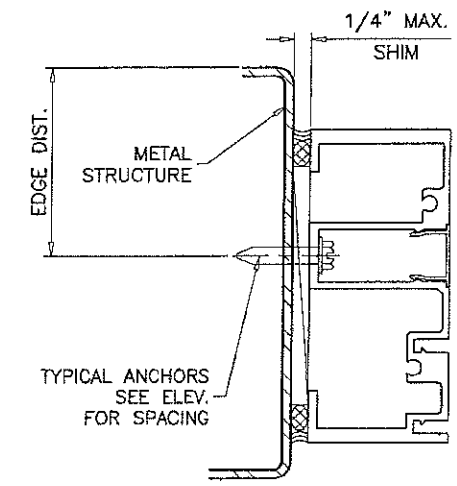
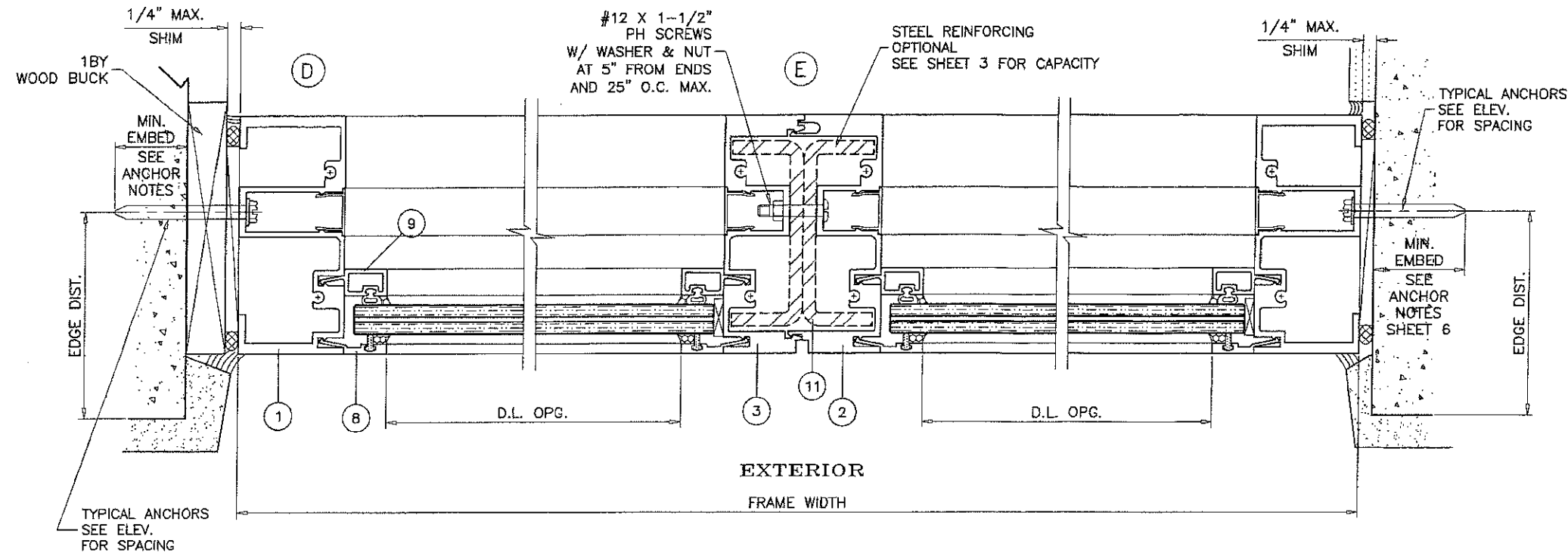
WS-4500 ALUM WINDOW WALL SYSTEM (L.M.I.)
ALUMEX PRODUCTS, INC.
 3151 E, 11th AVE.
 HIALEAH, FL. 33013
 TEL. (786) 475-8258 FAX. (-)

no	date	by	description
C	06.06.13	REV. PER RER COMMENTS	
D	02.15.13	NO CHANGE THIS SHEET	
E	06.08.15	UPDATED TO 2014 FBC	
F	02.24.16	GENERAL REVISION	
G	08.05.16	REV. PER RER COMMENTS	

date: 09-02-09
 scale: 3/8" = 1"
 dr. by: TARIQ
 chk. by:

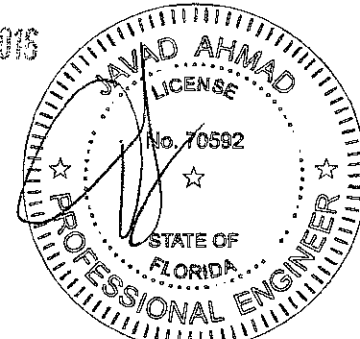
drawing no.
W09-45

sheet 6 of 9



JAMB ANCHORS DESIGN LOAD CAPACITY - PSF			
WIDTH (W)	TYPE 'A'	TYPE 'B'	TYPE 'C'
	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
30"	150.0	150.0	150.0
36"	150.0	150.0	150.0
42"	147.4	150.0	150.0
48"	129.0	150.0	150.0
54"	114.7	150.0	150.0
60"	103.2	150.0	150.0

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **16-0525.05**
Expiration Date **05/12/2020**
By *[Signature]*
Miami-Dade Product Control



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978

STORE W09-45CD1

WS-4500 ALUM WINDOW WALL SYSTEM (L.M.I.)

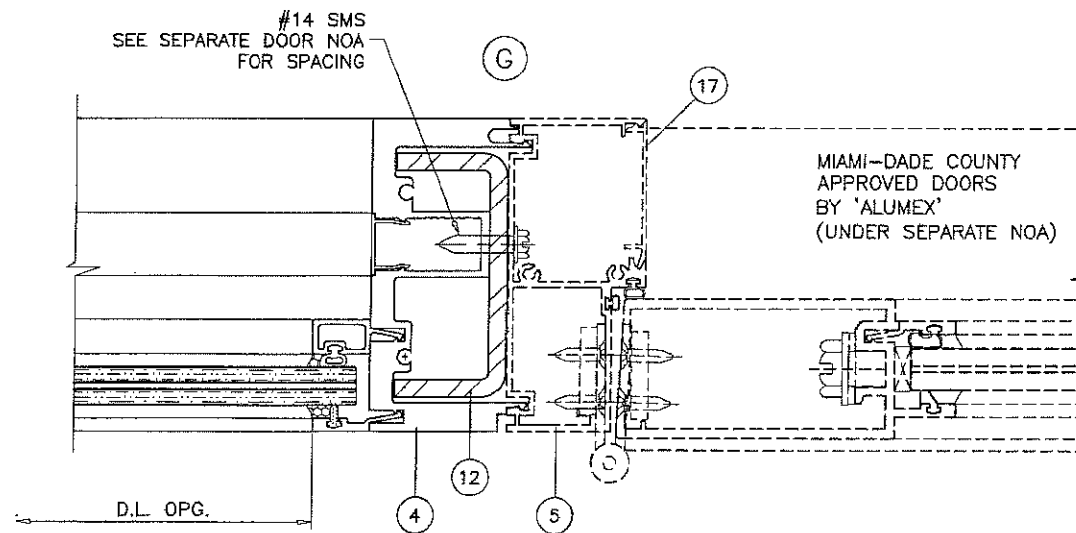
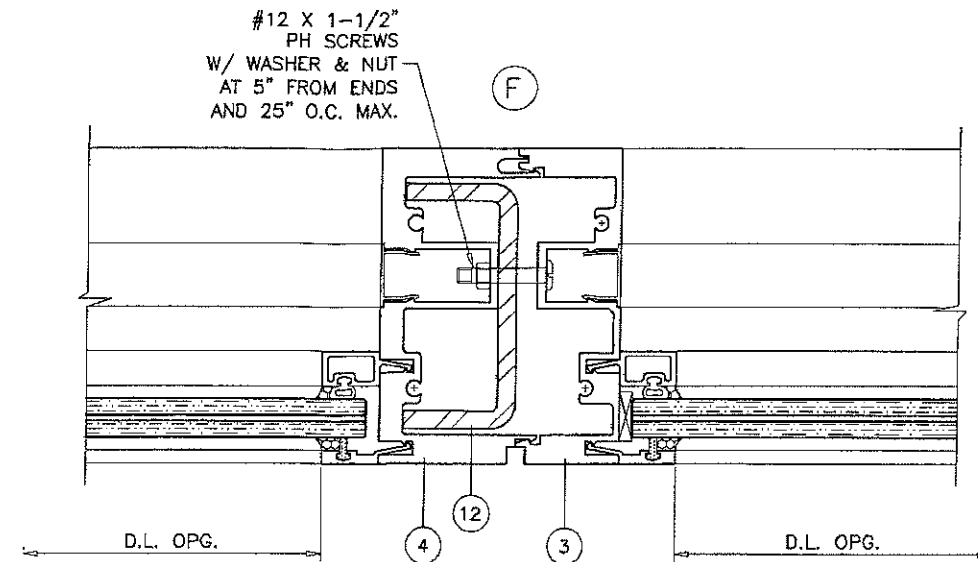
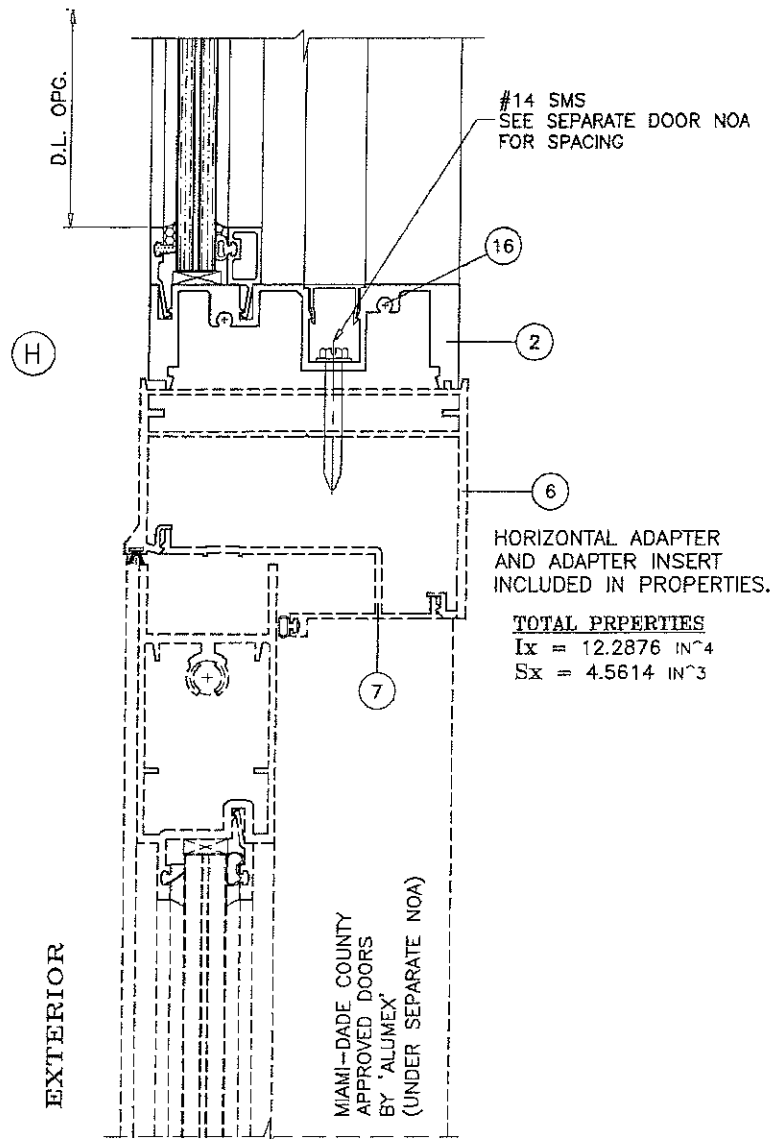
ALUMEX PRODUCTS, INC.
3151 E. 11th AVE.
HIALEAH, FL. 33013
TEL. (786) 475-8258 FAX. (-)

date: 09-02-09
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

revisions:

no	date	by	description
C	06.06.13		REV. PER REF COMMENTS
D	06.15.13		NO CHANGE THIS SHEET
E	06.08.15		UPDATED TO 2014 FBC
F	02.24.16		GENERAL REVISION
G	06.05.16		REV. PER REF COMMENTS

drawing no.
W09-45
sheet 7 of 9

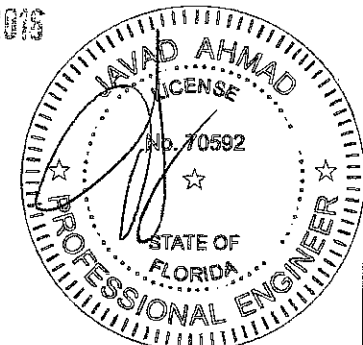


SEE SEPARATE NOA FOR DOOR DETAILS,
DESIGN LOAD CAPACITY AND DOOR ANCHORS.
LOWER VALUES FROM DOORS NOA OR
STOREFRONT SYSTEM CAPACITY CHARTS
WILL APPLY TO ENTIRE SYSTEM.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **16-0525.05**

Expiration Date **05/12/2020**

By 
Miami-Dade Product Control



WS-4500 ALUM WINDOW WALL SYSTEM (L.M.I.)
ALUMEX PRODUCTS, INC.
3151 E. 11th AVE.
HIALEAH, FL. 33013
TEL. (786) 475-8258 FAX. (-)

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE/W09-45CDI

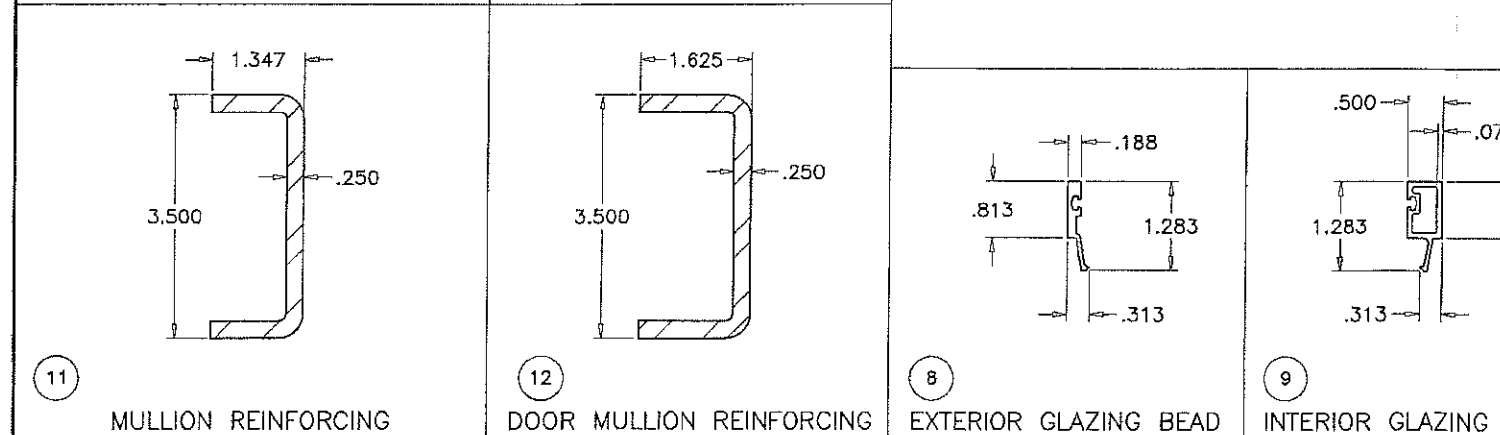
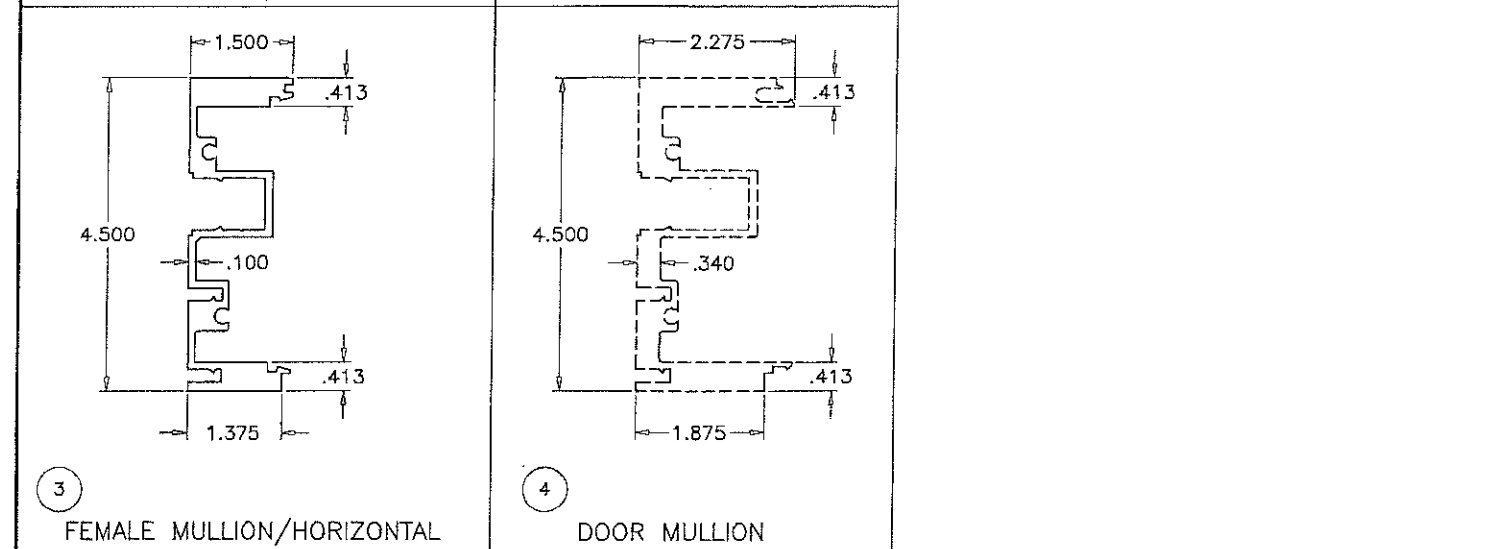
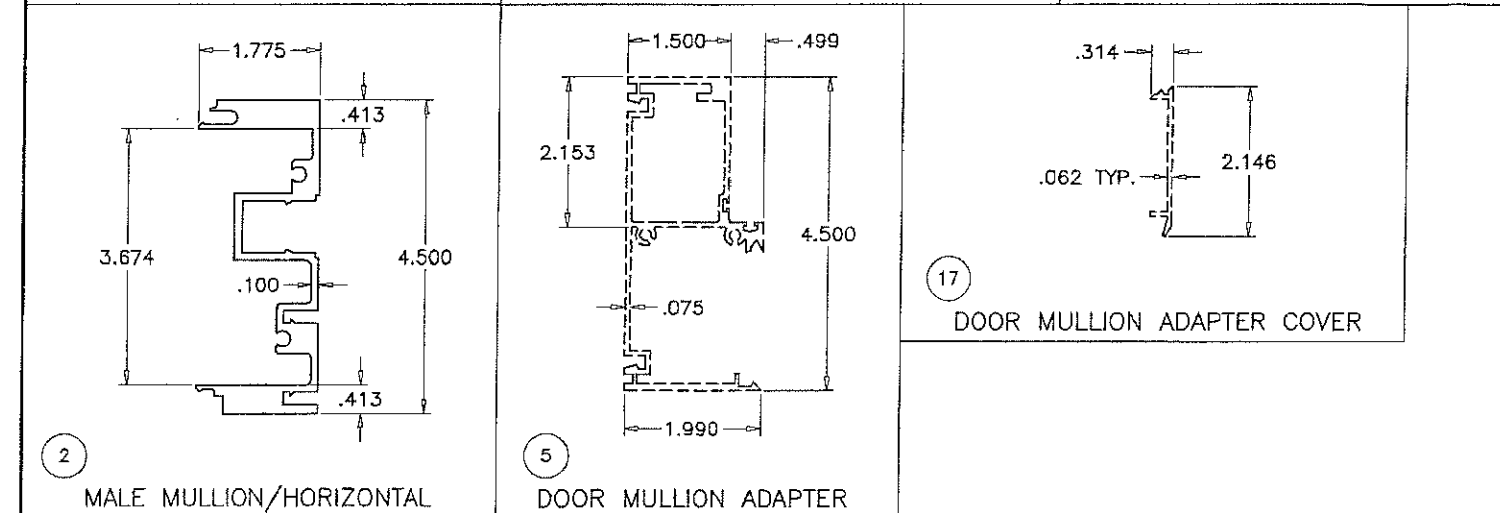
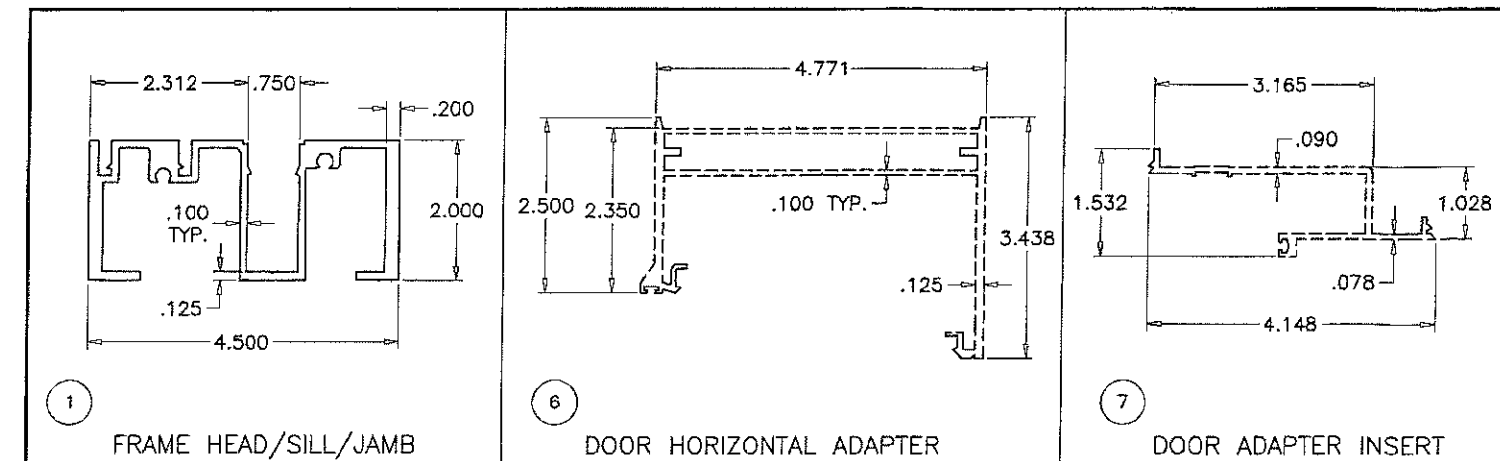
no	date	by	description
C	06.06.13	REV.	PER RER COMMENTS
D	08.15.13	REV.	PER RER COMMENTS
E	06.08.15	NO	CHANGE THIS SHEET
F	02.24.16	GENERAL	REVISION
G	06.05.16	NO	CHANGE THIS SHEET

date: 09-02-09
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W09-45

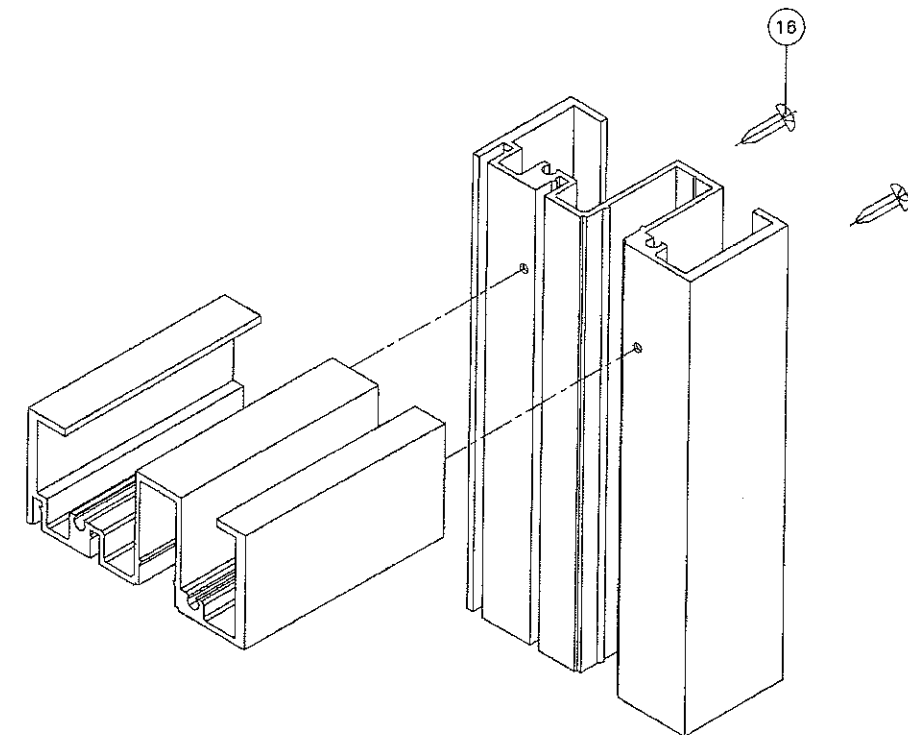
sheet 8 of 9

AUG 19 2016



ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	BA 5566	AS REQD.	FRAME HEAD/SILL/JAMB	6063-T6	-
2	BA 5564	AS REQD.	MALE MULLION/HORIZONTAL	6063-T6	-
3	BA 5565	AS REQD.	FEMALE MULLION/HORIZONTAL	6063-T6	-
* 4	BA 5568	AS REQD.	DOOR MULLION	6063-T6	-
* 5	FH-04011	AS REQD.	DOOR MULLION ADAPTER	6063-T6	-
* 6	FH-03613	AS REQD.	DOOR HORIZONTAL ADAPTER	6063-T6	-
* 7	FS-01058	AS REQD.	DOOR ADAPTER INSERT	6063-T6	-
8	-	AS REQD.	EXTERIOR GLAZING BEAD	6063-T6	-
9	-	AS REQD.	INTERIOR GLAZING BEAD	6063-T6	-
10	-	AS REQD.	FRAME COVER	6063-T6	-
11	-	AS REQD.	MULLION REINFORCING	STEEL	A36 GRADE
12	-	AS REQD.	DOOR MULLION REINFORCING	STEEL	A36 GRADE
13	-	AS REQD.	GLAZING SPACER	-	DUROMETER 75±5
14	-	AS REQD.	BULB GASKET	VINYL	DUROMETER 75±5
15	-	2/ LITE	SETTING BLOCK AT 1/4 POINTS	EPDM	DUROMETER 80±5 SHORE A
16	#14 X 2"	-	ASSEMBLY SCREWS	ST/ST	PH SMS
* 17	FS-01064	-	DOOR MULLION ADAPTER COVER	6063-T6	-

* NOT PART OF THIS APPROVAL

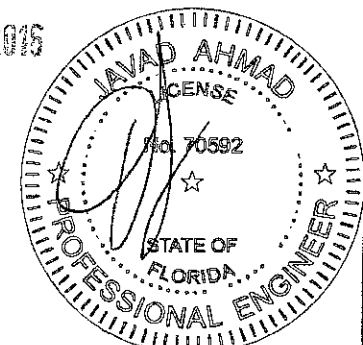


FRAME CORNERS
TYP. FOR END & INTERMEDIATE CORNERS

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 16-0525.05

Expiration Date 05/12/2020

By *[Signature]*
Miami-Bade Product Control



WS-4500 ALUM WINDOW WALL SYSTEM (L.M.I.)
ALUMEX PRODUCTS, INC.
3151 E. 11th AVE.
HIALEAH, FL. 33013
TEL. (786) 475-8258 FAX. (-)

revisions:	no	date	by	description
	C	06.06.13	REV. PER PER COMMENTS	
	D	08.15.13	REV. PER PER COMMENTS	
	E	06.08.15	UPDATED TO 2014 FBC	
	F	02.24.16	GENERAL REVISION	
	G	08.05.16	NO CHANGE THIS SHEET	

date: 09-02-09
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W09-45
sheet 9 of 9

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE W09-45CDI